

REMARKS

New claims 26 and 27 have been added. Support may be found on page 3, lines 21-23. No new matter has been added. Entry is requested.

Claims 2-12 and 19-25 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over Bauduin et al. (U.S. Patent No. 6,297,309), Radigon et al. (published U.S. application No. 2004/0122143), Domine et al. (published U.S. application No. 2004/0198897), Daily et al. (published U.S. application No. 2005/0064180) or Atofina (FR 2,819,821), in view of Rodriguez et al. (U.S. Patent No. 6,271,309).

Atofina was previously characterized by the examiner, based on its "X" Search Report categorization, as anticipating the claimed invention, but has not set forth the currently basis for the obviousness rejection based on Atofina in combination with Rodriguez..

The examiner maintains the position that Radigon discloses hot melt adhesives comprising ethylene 2-ethylhexyl acrylate, tackifiers and waxes referring to claims 1-6, paragraphs 0059-0065 and Tables 1-7 (for other ethylene alkyl acrylates), paragraphs 0068-0072 (for tackifiers and concentrations) and 0073-0076 (for waxes and their concentrations).

Bauduin, Domine and Daily are newly cited by the examiner. Bauduin is cited as disclosing hot melt adhesive, ethylene-2-ethylhexyl acrylate, ethylene-n-butyl acrylate, tackifier, wax and diluent, and as also disclosing low processing temperatures. Domain is cited as teaching hot melt adhesive and ethylene-acrylate copolymers, tackifiers, and wax. Daily is cited as disclosing blends of ethylene-2-ethylhexyl acrylate and ethylene-n-butyl acrylate with wax

The Rodriguez secondary reference is also newly cited by the examiner. Rodriguez is cited as teaching (at col. 1, lines 27-36) that functionalized polyolefins are excellent candidates to fill the requirements of structural hot melt adhesives because of their polarity help the

adhesion for high surface energy. It is the examiner's position that it would have been obvious to use a functionalized polyolefin, namely functionalized polyethylene, as diluent instead of unfunctionalized polyolefins. Applicants disagree.

It is well known that three basic criteria must be met in order to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Third, the prior art reference(s) must teach or suggest all the claimed limitations. Moreover, the teaching or suggestion to make the change and the reasonable expectation of success must both be found in the prior art. The examiner has failed to meet these requirements.

The claimed invention would not have been obvious at the time the invention was made in view of the disclosure of any one of Bauduin, Domine or Daily, each taken in combination with Rodriguez.

None of the cited Bauduin, Radigon, Domine, Daily or Atofina primary references disclose a hot melt adhesive that comprises a functionalized polyethylene additive. While Bauduin, Radigon, Domine, and Atofina describe use of copolymers of ethylene and an alkyl (meth) acrylate in the formulation of hot melt adhesives, Daily merely discloses use of alkyl acrylates.

Rodriguez, in discussing the state of the art, states that functionalized polyolefins may be *candidates* to fill the requirements of a structural hot melt adhesive. This document discloses that while functionalized polyolefin materials are available commercially, it has been discovered that by increasing the number of functional groups to three or greater per grafting site, polarity can be improved. Rodriguez is directed to water borne adhesives and emulsions comprising a

grafted polyolefin made by reacting a polyolefin with an ethylenically unsaturated monomer having functionality capable of reacting with an amino group and an amino carboxylic acid.

There is no disclosure or suggestion that leading to a reasonable expectation that functionalized polyolefins can be used in formulating hot melt adhesives, let alone in combination with alkyl acrylates or ethylene copolymers thereof such as ethylene-2-ethylhexyl acrylate copolymer. There is nothing the prior art that would motivate the skilled artisan to add a functionalized polyethylene to the compositions of the primary and references. The prior art is silent and does not suggest the use of ethylene 2-ethylhexyl acrylate copolymers in combination with ethylene vinyl acetate copolymer or ethylene butyl acrylate copolymers. There is no disclosure in the combined references that would lead the skilled artisan to a reasonable expectation of success in formulating hot melt adhesives comprising ethylene-2-ethylhexyl acrylate copolymer and a functionalized polyethylene additive.

Withdrawal of the rejection of claims 2-12 and 19-25 under Section 103 as being unpatentable over Bauduin, Radigon, Domine et al., Daily et al. or Atofina, in view of Rodriguez is requested.

Early and favorable action is solicited.

Respectfully submitted,



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